PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of	Docket No: Q63336
Junichi TSUJI	
Appln. No.: 09/802,895	Group Art Unit: 2624
Confirmation No.: 6637	Examiner: James A. THOMPSON
Filed: March 12, 2001	

For: IMAGE PROCESSING DEVICE AND PRINTER HAVING THE SAME

REPLY BRIEF PURSUANT TO 37 C.F.R. § 41.41

MAIL STOP APPEAL BRIEF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. § 41.41, Appellant respectfully submits

this Reply Brief in response to the Examiner's Answer dated April 5, 2006. Entry of this Reply

Brief is respectfully requested.

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STATUS OF CLAIMS

The status of the claims remains unchanged as set forth in the Appeal Brief filed

November 14, 2005.

Claims 1-9 and 14-26 are pending in the present application. The rejection of claims 1-9

and 14-26 is being appealed.

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-2 and 14-15 have been rejected under 35 U.S.C. § 103(a) as being unpatentable

over Bell (U.S. Patent No. 5,276,472; hereinafter "Bell") in view of Nakamura (U.S. Patent No.

5,684,262; hereinafter "Nakamura").

Claims 3, 9, 16 and 26 have been rejected under 35 U.S.C. § 103(a) as being unpatentable

over Bell in view of Nakamura and Leveque (U.S. Patent No. 5,495,468; hereinafter "Leveque").

Claims 17-18 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over

Bell in view of Nakamura and Kinoshita (U.S. Patent No. 4,983,996; hereinafter "Kinoshita").

Claim 19 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Bell in

view of Nakamura and Hatada (U.S. Patent No. 4,270,853; hereinafter "Hatada").

Claims 4-7, 20-22 and 24 have been rejected under 35 U.S.C. § 103(a) as being

unpatentable over Bell in view of Nakamura and Bernardi (U.S. Patent No. 5,692,225;

hereinafter "Bernardi").

Claim 23 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Bell in

view of Nakamura, Bernardi and Kinoshita.

Claim 8 and 25 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over

Bell in view of Nakamura, Bernardi and Spies (U.S. Patent No. 6,035,273; hereinafter "Spies").

ARGUMENT

Appellant now responds to the new points raised by the Examiner in his Answer.

Group 1: Argument 1: Nakamura does not teach the claimed voice tone converter

The Examiner asserts that "a voice tone converter for subjecting <u>said</u> speech data to tone conversion" is disclosed in Nakamura. As disclosed in the present invention, the speech data subject to tone conversion is speech data associated with an image. Assuming *arguendo* Nakamura performs a tone conversion, the tone conversion performed in Nakamura is not with respect to speech data associated with an image (speech data of claim 1). The Examiner continually asserts that Nakamura is not being cited for teaching the claimed speech data and is being cited for teaching the claimed tone converter. However, the Appellant submits that Nakamura does not teach the claimed tone converter since Nakamura does not disclose a voice tone converter for subjecting the claimed speech data to tone conversion. Merely because Nakamura performs some kind of tone conversion does not mean Nakamura teaches the tone conversion as claimed.

Group 1: Argument 2: The combination of the tone conversion of Nakamura with the speech data of Bell is not obvious

In response to Appellant's argument that it would not be obvious to combine the tone conversion performed in Nakamura with Bell, the Examiner asserts that the Appellant is merely describing particular intended uses of the overall system taught by Nakamura.

However, Appellant submits that a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. MPEP 2141.02(VI). As previously submitted, Nakamura discloses three modes of tone conversion. A

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first mode is a fixed mode which converts a supplied digital audio signal into a digital audio

signal that is a preset pitch lower than the supplied digital audio signal. See col. 4, line 65 to col.

5, line 1; col. 5, lines 17-19. The second mode is sound level control mode for controlling a tone

controller to convert the supplied digital audio signal depending on the level of the voice signal

picked up by a microphone. Col. 5, lines 1-4; col. 6, lines 9-16. The third mode is a genre-

dependent control mode for controlling the tone controller to convert the supplied digital audio

signal depending on the genre of the music piece that is reproduced. See col. 5, lines 4-7. The

different modes result in a unison effect of voice data as if two singers were singing although

only one singer is singing.

Consequently, the tone conversion performed in Nakamura is not desired in Bell. In

particular, a unison effect as if two singers were singing, which is a desired in the karaoke

system of Nakamura, is not desired for the photographic film of Bell. The Examiner cannot

exclude the components of the tone converter of Nakamura to teach the tone converter as

claimed when clearly the tone conversion performed in Nakamura is as described above. If the

tone converter of Nakamura were modified to be the tone converter as claimed, then the desired

effects of Nakamura would not be obtained. Clearly the Examiner is merely picking and

choosing elements of the Nakamura reference in order to teach the claimed elements and is not

looking at the reference as a whole.

Group 1: Argument 3: The combination of Nakamura with Bell does not teach the claimed speech data output unit.

In response to Appellant's argument that the combination of Nakamura with Bell does not teach the claimed "a speech data output unit for outputting said tone-converted speech data in association with said image data," the Examiner asserts that the Appellant is not considering the references in combination. In particular, the Examiner asserts that the output speech data taught by Bell would be tone converted speech data in view of Nakamura.

However, the printer 43, which the Examiner asserts teaches the claimed speech data output unit, merely prints bar code information without regard to tone-conversion. See col. 5, lines 35-44. Further, there is no teaching or suggestion in the Bell reference that printer 43 should be modified to output tone-converted speech data. In particular, Bell is not concerned with tone-converted speech data, let alone a speech data output unit for outputting tone-converted speech data in association with said image data. Consequently, the Examiner is adding additional components to the system of Bell when such a modification is not taught or suggested evidencing that the Examiner's reasoning is merely a result of impermissible hindsight.

Group 1: Argument 4: The complexities in the system of Nakamura is not obviously combinable with the simple system of Bell

In response to Appellant's argument that Bell and Nakamura are not in the same field of endeavor and that the processing complexities of Nakamura are inappropriate for the bar

scanning of Bell, the Examiner asserts that both Bell and Nakamura are concerned with the

processing of audio data and are therefore analogous.

As discussed in Bell, col. 4, lines 47-50, if a sound is not satisfactory, the user can easily

change the sound by simply repeating the recording process. There is absolutely no teaching or

suggestion that the sound of Bell should be modified by tone conversion. Bell seeks to relate

audio and images in a rudimentary way using a simple bar code, whereas Nakamura relates to

instrumentation and pitch adjustment. To the extent both references discuss audio processing,

their objects differ in a fundamental way such that the processing complexities in Nakamura are

wholly inappropriate for the bar scanning of Bell. It would not be obvious to one of skill in the

art to complicate the simple system of Bell with the complex tone conversion of Nakamura.

**Group 1: Argument 5: The combination of the Nakamura with Bell does not teach
the claimed speech data output unit**

The Examiner asserts that Nakamura teaches tone converted speech data and that Bell

teaches outputting the speech data, therefore the combination teaches the claimed speech data

output unit. However, as discussed above in Group 1: Argument 1, Nakamura does not convert

the claimed speech data (speech data associated with image data). Moreover, it would not be

obvious to modify the simple printer 43 of Bell to incorporate tone conversion information.

**Group 1: Argument 6: The combination of the Nakamura with Bell would result in
a substantial modification of the principle of operation of Nakamura**

Contrary to the Examiner's assertion, the combination of a tone converter into the printer

43 of Bell, would result in a substantial modification of the principle of operation of the Bell. As

discussed above in Group 1: Argument 4, Bell is not at all concerned with tone conversion.

Assuming *arguendo*, Nakamura teaches the claimed tone conversion, it would not be obvious to

modify the simple system of Bell with the tone conversion of Nakamura. Such a modification

would consequently result in a redesign of the elements of Bell as well as a change in the basic

principle under which Bell operates. MPEP 2143.01(VI).

For at least the above reasons, as well as those set forth in the Appeal Brief, claim 1 and

its dependent claims should be deemed patentable. To the extent claims 9, 14, and 26 recite

similar elements, claims 9, 14 and 26 and their dependent claims should also be deemed

allowable.

Group 2: Argument 1: Leveque does not disclose tone converted speech data and it
would not be obvious to send tone converted speech data to the printer of Bell

In response to Appellant's argument that Leveque does not disclose tone converted

speech data being constituted by speech before being converted and conversion data and that the

transmission medium of Leveque is not the speech data output unit (printer 43) initially cited by

the Examiner, the Examiner asserts that Bell was cited for teaching the claimed speech data

output unit and that Leveque is being cited for teaching the claimed conversion data being sent to

an output device.

However, Appellant submits that it would not be obvious upon viewing Leveque and

Bell, that conversion data sent via the transmission medium 36 of Leveque. The transmission

medium 36 of Leveque normally includes an antenna for receiving radio waves from the

atmosphere and supplies received modulated combined information signals to a receiver. See

col. 2, lines 8-10. Consequently, it would not be obvious to send the conversion data of Leveque to the printer of Bell.

Moreover, in Leveque, Lincompex compressors provide compressed voice signals and control tones. Both sets of data comprise data processed in some manner and thus there is no speech data prior to conversion as claimed.

Further, it would not be obvious to complicate the simple operation of Bell to incorporate the Lincompex processes of Leveque. The Examiner's reasoning is clearly a result of impermissible hindsight.

For at least the above reasons, as well as those set forth in the Appeal Brief, claims 3 and 16 should be deemed patentable. Since claims 9 and 26 recite similar elements, they should be deemed patentable for the reasons set forth above with respect to claims 1 and 3.

Group 3: Argument 1: Hatada teaches away from Bell

In response to Appellant's argument that Hatada teaches away from Bell, the Examiner asserts that Hatada is not being relied upon for teaching instant printing but is being replied upon for teaching magnetic recording.

However, in determining obviousness, the Examiner must look at the references in their entirety. MPEP 2145. Appellant submits that although the references do not need to be bodily incorporated into the structure of the primary reference, the references must be read as a whole and consideration must be given where the references diverge and teach away from the claimed invention.

For at least the above reasons, as well as those set forth in the Appeal Brief, claim 19 should be deemed patentable.

Group 4: Argument 1: The combination of Bernardi with Bell and Nakamura is not obvious

In response to the Appellant's arguments that Bernardi is contrary to the Appellent's invention, the Examiner asserts that this is merely conjecture and that there is no substantive proof.

However, Appellant submits that Bernardi was taken into consideration when drafting the present application. As discussed on pages 1-2 of the specification as originally filed, in Bernardi, the speech data associated with the image data is retrieved from a memory card or other recording medium and is converted to a bar code. In playing back speech data, the bar code is read from a print together with a bar code. However, a shortcoming of the Bernardi reference is that because the speech is original as recorded by a user, it is difficult to understand aurally. Therefore, the present invention overcomes the deficiencies of Bernardi. Consequently, it would not be obvious to combine the deficient teachings of Bernardi with Bell and Nakamura in order to teach the present invention.

For at least the above reasons, as well as those set forth in the Appeal Brief, claims 4-7, 10-22 and 24 should be deemed patentable.

CONCLUSION

For the above reasons as well as the reasons set forth in Appeal Brief, Appellant

respectfully requests that the Board reverse the Examiner's rejections of all claims on Appeal.

An early and favorable decision on the merits of this Appeal is respectfully requested.

Respectfully submitted,

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